



Facts About Commonly Used Colon Cancer Screening Tests

Colonoscopy

Colon cancer is the second leading cause of cancer-related deaths in the U.S. (when men and women are combined). It begins from growths called polyps, which form on the inner lining of the colon (large intestine). Screening tests have been developed to find these polyps at an early stage so that when polyps are removed, colon cancer can be prevented. Colonoscopy uses a colonoscope, a tube with a light and video camera on the end to see inside the colon. Most experts agree that colonoscopy is the gold standard (best) test for the detection of colorectal polyps because it has the highest sensitivity to accurately find polyps of all existing screening tests. Colonoscopy has been shown to detect 95% of all large polyps 10 mm or greater and 75% to 85% of all polyps less than 5 mm. No other screening test approaches colonoscopy's ability to find polyps.

The number of people diagnosed with colon cancer has declined 30% in the U.S. over the last 10 years because reimbursement for screening colonoscopy was introduced. High quality colonoscopy has been shown to prevent most colon cancers. Screening colonoscopy is so effective that it can be performed every 10 years for average risk patients, unlike less accurate tests which require repeated screening yearly or every few years. Although colonoscopy is more expensive than other screening tests, it is the only test that examines the entire colon, and both finds and removes precancerous polyps during the same single procedure, eliminating the need to schedule a second test.

Fecal Immunochemical Test (FIT)

FIT is a test for blood in the stool. It is a non-invasive at-home screening test that detects about 70% of colon cancers and about 30% of large colorectal polyps. Because FIT is not as effective as colonoscopy for detecting cancer or polyps, it should be performed annually. The at-home screening kit is sent to a lab for testing and people who have a positive FIT (blood detected) must undergo a colonoscopy. FIT has a false positive rate of about 5% (this is how often the test result is positive even though there are no polyps or cancer in the colon). FIT typically costs between \$20 and \$25.

Stool DNA (Cologuard®)

Like FIT, Cologuard is performed on a stool sample. The Cologuard test, approved by the FDA in 2014, is a combination of a test for microscopic blood (not visible to the naked eye) and a test for abnormal DNA. It detects both blood in the stool and the altered DNA that can be shed from the surface of polyps and cancers. It is performed using an at-home kit that includes a container to hold a stool sample. The sample is shipped to the testing laboratory where the testing is performed. Cologuard detects 92% of colorectal cancers and 42% of large precancerous polyps. Compared to FIT alone, Cologuard is better at detecting cancer (92% for Cologuard vs 70% for FIT) and better for detecting polyps, but the false positive rate is higher at 12% and gets higher as people become older. Because the cost of Cologuard is about \$500 (compared to \$20 to \$25 for FIT) and the rate of false positives is higher than FIT, Cologuard is recommended to be done only every 3 years rather than annually as is recommended for FIT. More research needs to be done, as the best interval, or how often the Cologuard test should be done, is not yet clear and it is unknown whether Cologuard every 3 years is better than FIT performed every year. Cologuard is less effective than colonoscopy for detecting polyps of any size. People who have a positive test must undergo colonoscopy.

Talk to your doctor about the screening test that is right for you. For more information, log on to www.asge.org or www.screen4coloncancer.org.

This fact sheet was developed by the ASGE Public & Member Outreach Committee. © ASGE.